

Appeal from that part of a decision of the Wyoming State Director, Bureau of Land Management, denying a request by FMC Wyoming Corporation for a royalty rate reduction for soda ash produced from tailings used in a tertiary mining process. WYE021612, WYW053867.

Reversed and remanded.

1. Mineral Leasing Act: Royalties--Sodium Leases and Permits: Generally--Sodium Leases and Permits: Royalties

The discretionary authority conferred by 30 U.S.C. § 209 (1994), enables BLM to exercise prudent business judgment in considering whether to grant or deny an application for royalty reduction. When BLM has granted such a reduction "for the purpose of encouraging the greatest ultimate recovery * * * and in the interest of conservation of natural resources," and it has deemed "it is necessary to do so in order to promote development," BLM's determination to then rescind a part of that reduction which it had previously granted will be reversed on appeal when the original reduction is amply supported by the facts of record and Appellant has shown that the subsequent determination was either arbitrary, capricious, or an abuse of discretion.

APPEARANCES: Marilyn S. Kite, Esq. And Michael J. Brennan, Esq., Holland and Hart, Jackson, Wyoming, Lawrence H. Wolfe, Esq., Holland and Hart, Cheyenne, Wyoming for Appellant; Lowell Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Lakewood, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE TERRY

FMC Wyoming Corporation (FMC or Appellant) has appealed from a March 5, 1997, Decision (1997 Decision) of the State Director, Wyoming, Bureau of Land Management (BLM). That Decision partially rescinded a

royalty rate reduction for production from certain mineral resource recovery operations performed by FMC, which FMC claims was granted to it in a December 21, 1994, Decision (1994 Decision). The Appellant claims the subsequent denial of the reduction in 1997 is arbitrary and capricious and should be reversed. We agree.

The 1997 Decision of the State Director appealed from determined, in pertinent part:

The royalty rate reduction granted by this office was for, and continues to be for, the recovery of sodium values attained from dissolution of trona that remains underground after conventional mining within sections 20 (WYW053867), and 28 (WYE021612). If sodium values in the injected waste stream are derived from direct mining and processing of section 20 or 28 trona, then that portion of the recovered sodium value does not qualify for the royalty rate reduction, nor do any other injected waste stream sodium values. Only the sodium values recovered from sections 20 and 28 qualify for royalty relief.

Therefore, sodium recovered from the underground tailings disposal and recovery program shall be allocated and royalties determined based upon the following:

1. Sixty percent (60 percent) of the sodium values derived from the tailings stream after underground tailings disposal, in situ trona dissolution, and recovery will be attributed to primary resource recovery and allocated to the leases conventionally mined. The finished product will be assessed a 6 percent or current lease royalty rate.
2. Forty percent (40 percent) of the sodium values derived from the tailings stream after underground tailings disposal, in situ trona dissolution and recovery will be attributed to in situ dissolution of trona. Calculation of royalty for the in situ dissolution of trona will be determined by allocating 50 percent of Federal sodium values recovered from sections 20 and 28 will have a 3.5 percent royalty rate.
3. Royalties paid to MMS shall be determined based on the soda ash or other primary products produced from the 40 percent sodium values derived from the tailings recovery stream.

(1997 Decision at 1-2.)

In its Statement of Reasons (SOR) for appeal, Appellant states that it has been mining trona in Sweetwater County, Wyoming, since 1949. FMC currently mines trona from bed 17, at the 1600 foot level, using a combination of long wall and continuous mining technology. (SOR at 1-2.) The mechanical mining methodology used by FMC and other trona miners involves sinking shafts into a trona bed, and extracting the mineral using a room and pillar mining method. This mining method allows for recovery of only 40-45 percent of the trona in place in the trona bed because large pillars must be left to support the great weight of the overburden. (SOR at 2.)

Large quantities of tailings result from processing soda ash from trona. FMC and other producers originally used large surface tailings impoundments to manage this waste, with FMC's tailing production averaging 2 million tons per year at this facility. (SOR at 3.) In the early 1980's, FMC experimented with a waste lake dredging program to determine whether dredging the salts out of the impoundment for reprocessing would provide an economic means of producing additional soda ash and managing the accumulation of tailings. Id. Recognizing the additional production costs necessary to carry out this environmentally preferable secondary recovery method, BLM granted FMC a royalty rate reduction in July 1983 for the production of soda ash from the residuum of this waste stream. Id. The dredging process remained a marginal operation, both in terms of environmental and economic benefits, despite the royalty rate reduction, and was terminated in 1994. (SOR at 4.)

During the same period, the Wyoming Department of Environmental Quality began pressing soda ash producers to dispose of tailings by reinjection into worked-out mine cavities rather than in above-ground impoundments. (SOR at 4.) Seeing an opportunity, FMC successfully developed a proprietary technology that would allow underground disposal of tailings with subsequent recovery of soda ash from enriched tailings waste water, which would be returned to the surface after dissolving the trona from the remaining pillars. Id. Appellant explains that FMC's proprietary technology is in use at a newly constructed processing plant which permits secondary recovery of much of the sodium value from this very contaminated stream, at higher cost, but with a reduction in the environmental impact when compared to surface impoundments. (SOR at 5.)

FMC states that it has consistently tried to maximize its recovery of sodium, that secondary recovery has often been a difficult and expensive effort, and that BLM has previously recognized the expense of that effort.

(SOR at 5.) FMC claims that there can be no doubt that the company sought a royalty rate reduction for all sodium values utilized in soda ash production from the injection/recovery project, and the correspondence of record establishes that BLM granted FMC's request. Id. Appellant claims that BLM is now attempting to undo a significant portion of its royalty relief decision, that this effort is not supported by the record, and that it is wholly unwarranted. (SOR at 6.) Further, Appellant claims, BLM's action is arbitrary, capricious, and an abuse of discretion, and must be rejected. Id.

To explain its position, FMC cites the chain of communications between FMC and BLM and what Appellant claims to be BLM's own language in granting without qualification the royalty relief sought by Appellant and granted in the 1994 royalty rate reduction. (SOR at 6.) Appellant states that by 1993, it had determined that underground tailings disposal activity offered the opportunity, but at significant cost, to recover additional sodium from both the tailings stream and the pillars left when conducting its underground mining operations. (SOR at 7.) In light of the uncertainty of the project and the expense of building and operating the special processing plant, FMC sought a royalty rate reduction in a January 4, 1993, submission to BLM in which it stated in pertinent part:

[t]he unique plant processing steps and the uncertainties involved with tailings disposal make the proposed project much more risky than a normal trona processing operation. Because of this unusual situation, we feel it proper to obtain a royalty rate reduction on the product resulting from this proposed project.

(Exhibit B to SOR at 5.) Accordingly, FMC asked for a royalty rate of

2.5% for the soda ash product (or other primary products) produced from the total waste mine water stream. This includes production from the secondary recovery of trona (or sodium values) from the requested lands, and for the soda ash product or other primary products produced from the waste sodium solution (which is used as the solvent for residual recovery, and which may have originated from mechanically mined ore) and which is intimately mixed with and indistinguishable from the solution mined values being recovered.

Id. at 23.

BLM requested additional financial information on April 14, 1993. (SOR at 9.) FMC submitted a revised application for a royalty rate reduction on December 6, 1993, which again sought royalty relief for all sodium values recovered from the enriched stream. See Exhibit D to SOR. 1/

The revised application stated the production from the project would include "production from secondary recovery of trona (or sodium values) from the requested lands, and for the soda ash product or other primary products produced from the waste sodium solution * * * which is intimately mixed with and indistinguishable from the solution mined values being recovered." Id. at 23.

1/ The Revised Application stated at 4: "we feel it proper to obtain a royalty reduction on the product resulting from this proposed project;" and at 22: "royalty rate requested is a 50% reduction * * * for the soda ash (or other primary products) produced from the total waste mine water stream."

As evidence of the fact that BLM clearly understood and was acting on the request for a royalty reduction for the recovery of sodium from both the tailings and the tertiary recovery of the unmined trona in the mine, Appellant included, as an attachment to its SOR, a December 1, 1994, Memorandum from W. Hord Tipton, BLM Assistant Director of Energy and Mineral Resources, to the Wyoming State Director, in which BLM stated that it approved the Wyoming State Office's recommendation of a rate reduction for the sodium products sold as a result of the "tertiary recovery process" planned by FMC. See Exhibit E to SOR. As stated in the Tipton Memorandum:

We concur with your recommendation for approval of a royalty rate reduction. However, in light of the significant environmental benefits from this project, other similar trona royalty rate reductions, and the established guidelines, it is our recommendation that the royalty be reduced to 3.5 percent for the Federal share of tertiary resource recovery rather than the 4 percent royalty rate that was proposed by the BLM Wyoming State Office. We concur with your recommendation to reduce the royalty for a period of five years from the approval date.

We concur with your recommendations for calculation of the Federal share of the gross product sold from tertiary recovery. Because the tertiary recovery of sodium minerals is derived from commingled Federal and non-Federal resources, royalty must be determined equitably. It is our understanding that the allocation of sodium products produced from tertiary recovery of sodium mineralization will be calculated in two parts. First, 60 percent of the sodium product recovered from tertiary methods is anticipated to be from tailings water. The Federal share recovered from the tailings water will be determined based on the previous month's proportion of Federal sodium minerals mined to total sodium minerals mined. The remaining 40 percent of the sodium products recovered from tertiary methods is from newly mined resources. The newly mined resources will be allocated for royalty purposes based on the proportion by area affected by underground tailings disposal which will be 50 percent Federal and 50 percent non-Federal.

(Exhibit E to SOR at 2.) In addition, Appellant included in its submission to the Board a copy of the Technical Analysis completed by BLM prior to issuance of its 1994 Decision. See Attachment to Exhibit F to SOR (hereinafter Technical Analysis). In the Technical Analysis, BLM stated that "FMC has requested a royalty rate reduction on the TA values they are losing in the processing of dry mined trona in addition to the sodium values recovered from the abandoned areas of the mine," and that the project "will recover the additional sodium values which are being lost due to the inefficiencies of the dredge recovery process." (Technical Analysis at 7, 9.)

In its 1994 Decision granting FMC the requested relief, BLM authorized a reduction in royalty

for recovery of sodium minerals that have not been previously recovered due to adverse engineering (mining and ore processing) considerations. Recovery of the resource that was previously lost is clearly in the interest of the greatest ultimate recovery. * * * The royalty reduction is necessary to promote development of the identified sodium resources because the proposed technology will not provide a competitive return on investment for the applicant. It is the determination of this office that the proposed royalty rate reduction meets all the statutory requirements for approval.

(1994 Decision at 1.) Subsequent to the 1994 BLM grant of the royalty rate reduction, FMC sought similar royalty rate reductions from the State of Wyoming and Union Pacific, both of which held royalty interests in the land mined by FMC. (SOR at 13-14.) In each case, a copy of the 1994 Decision was attached to the request. (SOR at 14.) In the case of the State, the royalty reduction request applied only to the sodium values attributed to that portion of the tailings representing the State's mineral interest. The State responded by granting FMC the requested royalty rate reduction for the sodium values present in the State portion of the tailings waste water stream prior to reinjection. See Exhibit I to SOR (June 2, 1995, letter from H.D. Kemp, Mineral Leasing and Royalty Compliance, Wyoming State Land and Farm Loan Office, to Thomas R. Coverdale, Plant Manager, FMC Wyoming Corporation). 2/

The Appellant states that, in October 1996, BLM for the first time took the position that the royalty relief it had granted applied only to sodium values recovered from the underground works, and that sodium values in the injected waste stream attributable to mechanical mining and processing of Federal leases did not qualify for the reduction. (SOR at 15; see Ted Murphy, BLM, October 22 Memorandum to Dave Pickard, FMC Wyoming Corporation, Exhibit J to SOR.) This was followed by the 1997 Decision, quoted above. See Exhibit K to SOR.

Appellant asserts that BLM, in the 1997 Decision, seeks to "reinterpret" a previously granted royalty rate reduction and that BLM's action is arbitrary, capricious, and unsupported by any factual basis, and must be set aside. (SOR at 17.) FMC emphasizes that the sodium recovery process depends upon recovery of all sodium values present in the enriched stream, and neither component is recoverable without the other. (SOR at 18.) Appellant states that separately, they are nothing more than waste products; but together, they become an expensive, but economically viable, product stream. Id. Appellant claims it would make no sense for BLM to have carved out one set of those sodium values for differential royalty treatment, as the agency now claims to have done. Id.

2/ Union Pacific granted no royalty relief.

Finally, FMC urges that BLM acted properly in BLM's 1994 grant of a royalty rate reduction for the consolidated sodium values, stating that BLM regulations clearly support BLM's 1994 Decision. (SOR at 19.) Citing 43 C.F.R. § 3503.2-4(a), Appellant recites that BLM can reduce the rate of royalty when such a reduction would encourage the greatest ultimate recovery of the leased mineral or when the lease cannot be successfully operated under the existing lease terms. (SOR at 20.) FMC argues that because of the financial risk associated with this new method of recovering heretofore unrecoverable trona, FMC deemed it proper to seek a royalty rate reduction, and that both the State and Washington offices of BLM reviewed the application and concurred. (SOR at 20; citing 43 C.F.R. § 3503.2-4(b)(2).) Appellant states that the regulation at 43 C.F.R. § 3503.2-4(a) clearly supports a royalty reduction in such circumstances. Id. FMC thus requests that BLM's subsequent "reinterpretation" of its prior royalty rate reduction be set aside, and that the agency be directed to apply the December 21, 1994, royalty rate to sodium products recovered as a result of the tailings injection program. (SOR at 21.)

In its Answer, BLM rejects FMC's arguments and states that the 1997 Decision explains that "the royalty rate reduction granted in 1994 applies only to sodium recovered through the dissolution of trona that remains underground after conventional mining within sections 20 and 28 * * *." (Answer at 1.) BLM further claims in its Answer that the 1994 Decision

holds that the royalty rate reduction does not apply to sodium present in, and recovered from, injected waste streams that are derived from the direct mining and processing of trona from sections 20 and 28, or present in, and recovered from, injected waste streams derived from any other lands.

(Answer at 1-2.)

In making the above argument, BLM states that

assuming for the sake of argument that FMC applied for a royalty rate reduction for all of the sodium recovered as a result of its reinjection/recovery process, including the sodium present in the waste solution that is injected in the mined out sodium beds, and assuming further that, prior to the issuance of the Acting State Director's December 21, 1994, employees within the BLM interpreted the FMC application to have made such a request and recommended that it be granted, the fact remains that the Acting State Director's December 21, 1994, decision is based upon the premise that FMC had only applied for a royalty rate reduction for the sodium minerals recovered from specific mined-out sections covered by two specific Federal sodium leases.

(Answer at 2.)

BLM states that FMC's royalty rate reduction application was processed according to the BLM's "Royalty Rate Reduction Guidelines for the Solid

Leasable Minerals." (Answer at 7.) BLM claims that those guidelines reflect the two alternative threshold requirements which must be met before the Secretary can exercise the discretionary authority vested in him by section 39 of the Mineral Leasing Act, 30 U.S.C. § 209 (1994). That section requires a finding that a royalty rate reduction (1) "is necessary to promote development," or (2) that "the leases cannot be successfully operated under the terms provided therein." *Id.* BLM states that after reviewing FMC's royalty rate reduction application, the BLM determined that a reduction could be granted, but not as requested in the application. (Answer at 9.) BLM claims that the environmental advantages of the project led BLM to conclude that a royalty rate reduction should be granted to encourage recovery of the unmined sodium, but that a reduced royalty was warranted only for trona which had been left behind (pillars, roof, floor) during the conventional mining process in sections 20 and 28. (Answer at 10.)

Moreover, BLM claims, the guidelines under which FMC's application was processed do not support a determination that a rate reduction should be authorized for a royalty rate reduction for sodium recovered from tailings.

(Answer at 7-8.) BLM states that the decision to grant relief only on the newly mined trona protects the economic interest of the United States and encourages recovery of additional underground trona, thereby promoting development of the resource. (Answer at 10.) BLM claims that a 40/60 split between newly mined and previously mined trona is an obvious break point for the royalty rate determination. It further claims that this royalty relief is only intended to be applicable to the affected Federal lands, that is, sections 20 and 28. *Id.*

[1] The Secretary of the Interior is authorized by 30 U.S.C. § 209 (1988) to grant reductions in production royalties. That section reads in relevant part:

The Secretary of the Interior, for the purpose of encouraging the greatest ultimate recovery * * * and in the interest of conservation of natural resources, is authorized to * * * reduce the rental, or minimum royalty, or reduce the royalty on an entire leasehold, or on any tract or portion thereof segregated for royalty purposes, whenever in his judgment it is necessary to do so in order to promote development, or whenever in his judgment the leases cannot be successfully operated under the terms provided therein.

In *Peabody Coal Co.*, 93 IBLA 317, 321, 93 I.D. 394, 396 (1986), we stated that "[t]he ultimate issue in the adjudication of any royalty reduction request is whether BLM may properly conclude, on the basis of material submitted by an appellant, that granting a reduction would best serve the interests of the Government." We held that 30 U.S.C. § 209 (1988), confers upon BLM

[t]he discretionary authority * * * to exercise prudent business judgment to accept the alternative that best protects the

economic interest of the United States as owner of the mineral resource. It necessarily follows that if the circumstances of a given case do not confront BLM with such a choice, the case presents no opportunity for BLM to exercise the discretion conferred by section 209. This conclusion is underscored by the fact that section 209 requires BLM to make one of two alternative threshold determinations before its discretionary authority can be invoked: (1) that a reduction "is necessary to promote development," or (2) "the leases cannot be successfully operated under the terms provided therein."

Id. at 326-27, 93 I.D. at 399-400 (footnote omitted).

The development scenario proposed by FMC, and the execution of those operations with ultimate recovery of resources that would otherwise be lost, and the benefits of increased royalties to the Government, as demonstrated in the record before us, are unrefuted by BLM. That record shows, contrary to the assertions of BLM, that FMC's proposal and rate reduction request went to the entire tertiary production operation, including recovery of unmined trona from pillars, floor and ceiling and tailings recovery. BLM evaluated FMC's overall proposal for tertiary recovery, including both tailings and unmined trona, as necessary to promote further economic recovery. In effect, the 1994 Decision was BLM's business judgment that the tertiary recovery program proposed by FMC would best serve the economic interests of the Government. We are unable to find, based on this record, that BLM's 1994 Decision was either unreasonable or unauthorized. On the contrary, it appears that the best economic interests of the Government would have been served had it been honored. In 1996, without consulting Appellant, BLM "clarified" its 1994 Decision and in its 1997 Decision, BLM revoked the previously approved portion of the earlier decision applying a royalty rate reduction to the sodium recovered from the Federal share of the tailings in the same manner as applied to the sodium recovered from that portion of the deposit left behind during the course of mining.

As further evidence of the actual intent of the 1994 Decision, the Briefing Summary BLM prepared in 1994 to facilitate its decision-making describes the proposed action, addresses the recommendation of the Wyoming State Office, and provides a recommendation to the Director. See Exhibit B to Submission of Newly-Obtained Evidence in Support of FMC's SOR (Exhibit B). Significant Findings Nos. 4 and 5 of this document clearly state that BLM understood and intended to apply the royalty rate reduction to all sodium products recovered from FMC's tertiary recovery process. Specifically, Finding 4 states that 60 percent of the resource to which the royalty rate reduction would apply has already been recovered in the tailings solution. Finding 5 states that the remainder of the resource to which the royalty rate reduction would apply, 40 percent, "is anticipated to be recovered from pillars remaining in abandoned sections of the mine that have been selected for tailings disposal." Id. In another section, the Briefing Summary states: "The royalty rate reduction is needed to provide the incentive necessary to promote development of the sodium mineralization in the tailings pond as opposed to construction of other impoundments." (Exhibit B at 2.) This evidence merely corroborates

the significant evidence presented by Appellant of BLM's intention at the time the 1994 Decision issued--an intention similarly understood by the State of Wyoming in granting parallel relief.

In Eddleman Community Property Trust, 106 IBLA 376, 377 (1989), the Board recognized that BLM may not take actions that are arbitrary, capricious, or an abuse of discretion. The Board stated in Eddleman that

[i]t is incumbent upon BLM to ensure that its decision is supported by a rational basis and that such basis is stated in the written decision, as well as being demonstrated in the administrative record accompanying the decision. Roger K. Ogden, 77 IBLA 4, 7, 90 I.D. 481, 483 (1983).

In Ogden, *supra*, at 7, the Board stated that unless BLM's decision is supported by a rational basis, "the Department is left open to the charge that its actions are arbitrary." Similarly, in Mesa Wind Developers Zond Systems, Inc., 146 IBLA 263 (1998), the Board reversed a BLM decision because the correspondence between the appellant and BLM established that BLM had changed its "interpretation" after the fact. As the Board noted in Mesa, "[i]t was not until after the completion of the project that BLM raised its objections. Nor did BLM indicate that Appellants were not carrying out the project in a reasonable manner." *Id.* at 270. We find the same factual circumstance here.

In this case, neither the recovery of sodium from tailings or from the previously unmined subsurface "pillars" was economical as an individual effort. In fact, in 1983 Appellant was offered a rate reduction to attempt to reprocess the sodium from the tailings pond alone. That operation proved to be uneconomical. The operation was economical only if the total product recovered from a combined process was accorded the rate reduction, because the cost of the new technology and new processing plant reduced Appellant's projected earnings significantly. This was recognized in the Tipton Memorandum described above and in the Summary Briefing document used by BLM in its 1994 decisional process, further evidenced by the State's interpretation in granting the requested relief from the State's share of the royalty after being provided the 1994 Decision.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the March 5, 1997, Decision appealed from is reversed and remanded to BLM for action consistent with this decision.

James P. Terry
Administrative Judge

I concur:

R.W. Mullen
Administrative Judge